

*What is claimed is:*

1 *Sub A1* 1. A voice-operated arrangement for interacting with a dual-tone multifrequency (DTMF)-controlled system, the arrangement comprising  
2 a speech recognition unit responsive to voice commands from a user and  
3 generating a digital signal representative of a particular received voice command;  
4 a speech-to-DTMF tones application, responsive to the digital signal outputs from  
5 the speech recognition unit for accessing a proper user record from a plurality of user  
6 records, retrieving dial-out information for the accessed user's DTMF-controlled system  
7 and completing a communication path between the user and said DTMF-controlled  
8 system, wherein said voice-operated arrangement monitors the communication path and  
9 retrieves predetermined voice commands uttered by the user and translates said  
10 predetermined voice prompts into DTMF tones which are thereafter transmitted to said  
11 DTMF-controlled system.

1 *Sub A2* 2. The arrangement as defined in claim 1 wherein each user record includes a  
2 spoken voice identification field.

1 3. The arrangement as defined in claim 2 wherein each user record further  
2 includes a spoken voice password field.

1 *Sub A2* 4. The arrangement as defined in claim 1 wherein each user record comprises a  
2 plurality of different fields for each DTMF-controlled system associated with that user.

1 5. The arrangement as defined in claim 4 wherein the plurality of different fields  
2 for a DTMF-controlled system in a user record comprises a dial-out access number for  
3 the DTMF-controlled system and a mapping of a plurality of voice commands to an  
4 associated plurality of DTMF tone sequences.

1           6. The arrangement as defined in claim 5 wherein the plurality of different fields  
2           further comprises a series of DTMF tones for accessing the proper DTMF-controlled  
3           system within the user's plurality of such systems.

1           7. The arrangement as defined in claim 1 wherein at least one DMTF-controlled  
2           system is a voice messaging system.

1           8. A method for interacting with at least one DTMF-controlled  
2           telecommunications system, the method comprising the steps of:  
3            a) accessing, by a user, a speech-to-DTMF tone application;  
4            b) retrieving a proper user record for the user identified in step a);  
5            c) dialing out, by the application, to a DTMF-controlled system included in the  
6           user record retrieved in step b);  
7            d) bridging together the call between the user and the application and the call  
8           between the application and the DTMF-controlled system;  
9            e) in response to predefined voice commands uttered by the user and received by  
10           the speech-to-DTMF tone application, translating said voice commands into one or more  
11           DTMF tones accepted as commands by the DTMF-controlled system; and  
12           f) transmitting said translated DTMF tone commands from the speech-to-DTMF  
13           tone application to the DTMF-controlled system.

1           9. The method as defined in claim 8 wherein in performing step a), the method  
2           comprises the additional step of authorizing a user by requesting and validating a spoken  
3           user password.

1           10. The method as defined in claim 8 wherein the method is used for retrieving  
2           messages from a plurality of different messaging systems associated with a single user,  
3           the method comprising the further steps of  
4            g) querying the user record for additional DTMF-controlled system fields; and  
5            h) repeating steps c) – f) for each additional DTMF-controlled system.